

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

mV

APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/627,566		07/28/2000	Jonathan L. Goodwin	ATA-286	2331	
959	7590	10/01/2003		EXAMINER		
LAHIVE 28 STATE	& COCKI	FIELD	BUI, V	BUI, VY Q		
	MA 0210	09	ART UNIT	PAPER NUMBER		
ŕ				3731	17	
			DATE MAILED: 10/01/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

	<u> </u>	Applicatio	n No.	Applicant(s)	()				
Off	fice Action Summary	09/627,560	o 	GOODWIN ET AL.	· •				
<i>5</i>	, , , , , , , , , , , , , , , , , , ,	Examiner		Art Unit					
The N	MAILING DATE of this communicati	Vy Q. Bui	cover sheet with the c	3731 orrespondence address :	-				
Period for Repl				••••••••••••••••••••••••••••••••••••••					
THE MAILIN - Extensions of t after SIX (6) M - If the period for - If NO period for - Failure to reply - Any reply recei	NED STATUTORY PERIOD FOR G DATE OF THIS COMMUNICAT ime may be available under the provisions of 37 ONTHS from the mailing date of this communicately specified above is less than thirty (30) day reply is specified above, the maximum statutor within the set or extended period for reply will, by the Office later than three months after the erm adjustment. See 37 CFR 1.704(b).	FION. CFR 1.136(a). In no ever tion. ys, a reply within the statu y period will apply and will by statute, cause the appli	nt, however, may a reply be time tory minimum of thirty (30) day expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered timely. the mailing date of this communica D (35 U.S.C. § 133).	ation.				
1)⊠ Resp	onsive to communication(s) filed o	on <u>30 June 2003</u> .							
2a)⊠ This a	action is FINAL . 2b)[This action is	non-final.						
	this application is in condition for				its is				
Disposition of (d in accordance with the practice Claims	under <i>Ex parie Qi</i>	<i>layle</i> , 1935 C.D. 11, 4	33 O.G. 213.					
4) Claim((s) <u>1-3 and 6-9</u> is/are pending in t	he application.							
4a) Of	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim	Claim(s) is/are allowed.								
6)⊠ Claim(Claim(s) <u>1-3 and 6-9</u> is/are rejected.								
7)∐ Claim(Claim(s) is/are objected to.								
•—	(s) are subject to restriction	and/or election re	equirement.						
Application Pa									
,	ecification is objected to by the Ex		It would by the Fre						
•	awing(s) filed on is/are: a)[
• • •	cant may not request that any objection oposed drawing correction filed on								
•	proved, corrected drawings are require								
12) The oath or declaration is objected to by the Examiner.									
,	35 U.S.C. §§ 119 and 120								
-	wledgment is made of a claim for	foreign priority un	der 35 U.S.C. § 119(a	a)-(d) or (f).					
•	b)☐ Some * c)☐ None of:								
•									
	The second secon								
_	Copies of the certified copies of the application from the Internation attached detailed Office action for	nal Bureau (PCT	Rule 17.2(a)).		!				
	rattached detailed Office action to rledgment is made of a claim for d				cation)				
,—	nedgment is made of a claim for d ne translation of the foreign langua				sation).				
	vledgment is made of a claim for c								
Attachment(s)									
2) Notice of Dra	erences Cited (PTO-892) ftsperson's Patent Drawing Review (PTO- Disclosure Statement(s) (PTO-1449) Paper		· ===	y (PTO-413) Paper No(s) Patent Application (PTO-152)	·				

Application/Control Number: 09/627,566

Art Unit: 3731

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over BANAS et al (5,749,880) in view of KOWLIGI et al (5,466,509).

As to claims 1 and 4, BANAS (Fig. 7, 7B; col. 18, lines 51-60) discloses a stent-graft implant 100 comprising stent 116 sandwiched between inner cover 112 and outer cover 114 of expanded PTFE having IND in a range from 0.1-100 microns, inner cover 112 and outer cover 114 (each of a predetermined thickness) extend substantially along the entire length of the stent 116. BANAS does not disclose the expanded PTFE having IND of more than 100 microns. However, KOWLIGI (col. 2, lines 4-7; claim 1) discloses a ePTFE graft material having IND in the range from 10-200 microns or greater than 100 microns to provide a graft material having high porosity (KOWLIGI: column 2, lines 4-7). In view of KOWLIGI teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide ePTFE of IND greater than 100 microns for the BANAS's inner cover 112 or outer cover 114 as this configuration of portion of the inner and outer covers would facilitate forming of a graft having high. The fact that the Applicants use the cover/graft having IND >100 microns in the present stent-graft

Application/Control Number: 09/627,566

Art Unit: 3731

to expand the stent) from KOWGILI (to provide a high porosity for the graft) does not alter the conclusion that the cover/graft as claimed would be prima facie obvious from EANAS the cover/graft disclosed in the DAVILA reference." In re Lintner, 173 USPQ 560. In addition, even though BANAS and KOWGILI do not disclose graft material having IND of greater 100 microns to reduce a deployment pressure necessary to expand the stent-graft combination to less than 10 atmospheres, since every structural limitation as recited in the claims is included by the combination stent-graft of BANAS and KOWGILI (stent and cover/graft having IND greater than 100 microns), inherently, the stent-graft combination of BANAS and KOWGILI would require a reduced deployment pressure (less than 10 atmospheres for example).

As to claims 6 and 9, KOWGILI (Table in col. 3 shows wall thickness of 0.64 mm or about 0.026" >0.008".

2. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over BANAS and KOWGILI as applied to claims 1 and 6 above, and further in view of MYERS et al. (5,735,892).

BANAS and KOWGILI discloses substantially all structural limitations of the claimed invention, except for inner cover 112 is folded over stent 116. However, folding an inner cover over an outer surface of a stent to form an outer cover is well known in the art. For example, MYERS (Fig. 8) discloses inner cover 83 folded over the outer surface of stent 10 to form outer cover 85.

Application/Control Number: 09/627,566

Art Unit: 3731

3. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over BANAS and KOWGILI as applied to claims 1 and 6 above, and further in view of MYERS et al. (5,735,892).

As to claims 3 and 8, in addition to BANAS and KOWGILI, MYERS (Fig. 8) shows inner cover 83 folded over the outer surface of stent 10 to form outer cover 85. BANAS and KOWGILI do not show the second portion of the inner cover 83 folded over the first portion of the inner cover 83. Naturally, applying multiple folding layers over an object would provide extra securement between the folding layers and the object. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to fold the second portion of the inner cover 83 over the first portion of the inner cover 83 as this configuration would provide extra securement between MYERS stent 10 and graft 83. Beside the benefit of providing an extra securement between MYERS stent 10 and graft 83 as discussed above, the second folding of the second portion of the graft 83 does not appear to provide any significant improvement for the device's performance and therefore would not be considered as an significant novel feature of the instant application over the reference.

Response to Amendment

The Applicants' "Remarks" October 9, 2002 has been carefully considered but is moot in view of new rejections presented in this "Office Action".

All the references applied in the present rejection have filing dates prior to August 5, 1998, which is the date the applicants are claiming in the "Affidavit Under 37 CFR 1.131" entered on 6/30/2003.

Art Unit: 3731

Conclusion

Applicant's filing of the "Affidavit Under 37 CFR 1.131" entered on 6/30/2003 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is (703) 306-1382 and whose email address is vy.bui@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano, can be reached at (703) 308-2496. The fax number for this Unit is (703) 308-2708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist at (703) 308-0858

VQB

9/16/2003.